

SUPERFUND

Fact Sheet

FRONTIER HARD CHROME Vancouver, Washington



U.S. ENVIRONMENTAL PROTECTION AGENCY

February 2003

Frontier Hard Chrome Buildings Demolished, Cleanup Underway

Now that two buildings have been torn down, EPA (U.S. Environmental Protection Agency) is cleaning up pollution at the Frontier Hard Chrome Site in Vancouver, Washington. This former chrome-plating site is contaminated with hexavalent chromium. If not controlled, hexavalent chromium could threaten human health and the environment.



The Frontier Hard Chrome site is contaminated with hexavalent chromium.

The two buildings sat over the most contaminated area of the site, called the "hot spot." With the buildings out of the way, EPA is now getting ready to inject a reducing agent underground, along the edge of the "hot spot." The reducing agent is a chemical that will react with the hexavalent chromium, making it non-toxic.

The first injections will form an underground barrier wall about 150 feet long, a sort of fence to keep contamination from spreading. Any hexavalent chromium that passes through this "wall" will be changed to trivalent chromium. Trivalent chromium is generally non-toxic.



Building demolition clears the way so cleanup can begin.

Then, the foundations of the demolished buildings will be removed. More contaminated soil will be exposed. Reducing agent will be mixed into this newly exposed area, in some places as deep as 30 feet. EPA expects to finish treating the remaining soil and groundwater throughout the "hot spot" by September.

"This is a new cleanup process," says EPA Project Manager Sean Sheldrake. "This modern technology allows us to clean up this site in a very effective way. We'll be monitoring the results over the long term. And when we're done, we'll leave behind a much safer site."

Site Background

The Frontier Hard Chrome (FHC) site is located in southwestern Washington, in the city of Vancouver. The site is about a half mile north of the Columbia River. Chrome plating operations took place at this site between 1958 and 1982. FHC, which operated at the site from 1970 to 1982, discharged wastewaters with hexavalent chromium to an on-site dry well. Based on concerns that contaminated water could reach the Columbia River or drinking water wells, EPA added the site to the National Priorities List (NPL) in 1983. The NPL is a list of the nation's most contaminated hazardous waste sites.

When first detected, the polluted groundwater (exceeding State cleanup standards) extended about 1600 feet southwest from the facility. Monitoring has shown that this area of

groundwater contamination has changed in size and shape over time. However, the "hot spot" under the site has shown consistently high concentrations of chromium.

In the 1980's EPA evaluated ways to clean up contamination, but EPA was not able to find a cost-effective remedy for soil at that time. Because the groundwater plume was decreasing, EPA did not move forward with groundwater cleanup.

EPA removed some contaminated surface soil from the site in 1994, and continued monitoring and evaluating new cleanup technologies. Now that this new treatment technology is available, EPA can move forward with cleanup. In 2001, after seeking public comment, EPA selected a final cleanup plan, and work is underway now.

For More Information

For general information, contact Andrea Lindsay, Community Involvement Coordinator, at (206) 553-1896 or 1-800-424-4372.

For technical information, call Sean Sheldrake, Project Manager, at (206) 553-1220 or 1-800-424-4372.

Web Site: <http://yosemite.epa.gov/r10/cleanup.nsf/sites/fhc>

To request additional services for persons with disabilities, call 1-800-424-4372.



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